

**Before the  
Federal Communications Commission  
Washington, DC 20554**

In the Matter of:	)	
	)	
Implementing Public Safety Broadband Provisions of the Middle Class Tax Relief and Job Creation Act of 2012	)	PS Docket No. 12-94
	)	
Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band	)	PS Docket No. 06-229
	)	
Service Rules for the 698-746, 747-762 and 777- 792 MHz Bands	)	WT Docket No. 06-150

**COMMENTS  
of  
THE STATE OF ILLINOIS**

The state of Illinois (the State) respectfully submits these comments in response to the Commission's Notice of Proposed Rulemaking in the above-captioned proceeding.<sup>1</sup> These Comments focus on the issue of the relocation of 700 MHz Narrowband Systems licensees that remain in what has been redesignated as broadband public safety spectrum. Illinois, one of the licensees to which this relocation would apply, urges the Commission, in consultation with FirstNet, to provide a definitive source of funding and a rational process to implement the relocation. The State deployed its 700

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<sup>1</sup> Notice of Proposed Rulemaking, PS Docket No. 12-94, PS Docket No. 06-229 and WT Docket No. 06-150, released March 8, 2013

Narrowband system under valid authority from the Commission and should not be required to bear the cost of the relocation. In addition to sufficient funding, the State and other public safety licensees facing relocation will need a process that recognizes the real work needed to complete the relocation process. Finally, that process must not compromise our public safety operations during or after relocation implementation.

### **Background**

The state of Illinois has always been a leader when it comes to the deployment of two-way mission critical public safety communications. In the 1960s Illinois deployed VHF interoperability mutual aid channels for law enforcement well before other states in the nation did so. When the 700 MHz Narrowband spectrum became available, the State once again took early leadership. We planned out our statewide Project 25 digital platform utilizing the 700 MHz Narrowband spectrum. Effective communications have assisted our public safety first responders in saving countless lives and protecting property in service to the population within the state. This was made possible through agreements that were executed years prior to ensure the availability of the necessary spectrum provided by the Commission to conduct our mission successfully. The 700 MHz Narrowband spectrum has been an essential resource for state deployment of its Project 25 digital platform to provide communications and interoperability for the State.

To make way for public safety broadband spectrum, the Commission reconfigured the 700 MHz band plan, releasing its new plan July 31, 2007. As a result, a portion of the previously designated narrowband spectrum in which the state of Illinois and some other public safety licensees had deployed became part of the broadband spectrum. That broadband spectrum was licensed to the Public Safety Spectrum Trust (PSST) for public safety broadband operation but subsequently was licensed to FirstNet.

### **External Funding**

The state of Illinois supports the changes to the bandplan the Commission made in 2007 to make way for a nationwide public safety system. Illinois anticipates a broadband system that is designed to meet our First Responders' operational requirements for faster data and video applications. The State has a massive investment in radio resources and infrastructure and cannot self-fund the narrowband relocation of our narrowband statewide Project 25 system to comply with the revised bandplan. The state of Illinois followed the rules in place when planning its system, obtaining its licenses and implementing system deployment. Once the bandplan was reconfigured, the State

obtained a waiver from the Commission to continue operation and deployment of its 700 MHz statewide P25 system in the spectrum redesignated for broadband because public safety would have been compromised had the waiver not been granted.

Below is a summary breakdown of the funding required to relocate our system to conform to the reconfigured 700 MHz band plan. Our statewide Project 25 digital radio platform is growing every month. As of May 24, 2013:

<b>Category</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Extended</b>
Futurecom Vehicular Repeaters	875	\$ 18,000	\$ 15,750,000
Reprogramming Radios	36,000	\$ 150	\$ 5,400,000
Retuning Fixed Stations & Filters	92 repeaters across 36 sites	288 hrs at \$228 /hour	\$ 65.664
<b>Total</b>			<b>\$ 21,215,664</b>

Therefore, the State recommends the Commission, together with FirstNet, establish that the cost to relocate narrowband systems from what is now designated as broadband spectrum to the newly designated narrowband spectrum be considered an eligible expense for FirstNet to use in deploying the broadband network. The network cannot be deployed on a nationwide basis until the narrowband systems are relocated. The state of Illinois is not alone in facing the relocation issue and recommends seeking a nationwide resolution. The source of funding should be determined and a schedule for its distribution to fund narrowband relocations should be set. We urge the Commission to provide sufficient funding, timely availability of the funding, and an effective implementation process.

The State also responds to questions the Commission raises in its Notice of Proposed Rulemaking that relate to the 700 MHz narrowband relocation issue.<sup>2</sup>

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<sup>2</sup> NPRM at paragraphs 53-56

1. In light of the Public Safety Spectrum Act, which directs the Commission to reallocate this spectrum and license it for use by FirstNet, should FirstNet be responsible for this transition?
  - a. *Illinois response: Yes, as noted above, the relocation costs should be covered by the funding Congress provided to FirstNet. The Commission should also stay involved as it has the responsibility for managing the spectrum and administering rules for licensees.*
2. Can the Commission require FirstNet to manage this process, or require FirstNet to provide funds for it?
  - a. *Illinois response: The funding needs to be made available. Whether or not the Commission "requires" FirstNet to do so or engages in a dialogue that leads to the availability of FirstNet funding is a matter between the Commission, NTIA and FirstNet.<sup>3</sup> While the Commission could establish some reasonable guidelines, the actual relocation of public safety narrowband systems should be managed or contracted by the licensees affected.*
3. To what extent would such requirements be consistent with FirstNet's authority under Section 6206(a)(6) of the Public Safety Spectrum Act to take actions that "it may from time to time determine necessary, appropriate, or advisable to accomplish the purposes" of that Act?
  - a. *Illinois response: The state of Illinois believes funding the narrowband relocation is consistent with the letter and spirit of that section of the law. Further, we see nothing in the Spectrum Act that would prohibit using a small portion of the \$7 billion in funding to cover narrowband relocation costs.*
4. Would fees collected by FirstNet be available for such funding as a way of "constructing, maintaining, operating or improving the network" under Section 6208 of the Act?
  - a. *Illinois response: use of the upfront monies made available for deployment should be used to re-locate public safety users*
5. Is there a third party source that could fund relocation?
  - a. *Illinois response: None known*
6. Absent funding from FirstNet or another third party source, can and should the Commission require these incumbents to transition operations at their own expense?
  - a. *Illinois response: No, Illinois does not have available funds to pay for this transition*

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<sup>3</sup> FirstNet previously enlisted the help of NTIA in regulatory matters

7. If no source of funding is available, should that impact the timing for relocation?
  - a. *Illinois response: If there is no funding source, it is unclear how Illinois could relocate in the foreseeable future, regardless of the schedule.*
8. Are there other ways to provide incumbents with an incentive to transition their operations?
  - a. *Illinois response: Illinois is willing to relocate, but the costs need to be covered.*
9. In terms of the timing of such a transition, should the Commission establish a hard deadline by which relocation should be accomplished?
  - a. *Illinois response: Yes, it would be logical to establish a hard deadline once the funding is actually available to Illinois and other licensees who must relocate. The Commission should not establish a deadline until the funds are actually committed and available. The relocation issue has suffered from false starts before because anticipated funding did not materialize. The time span between actual availability of the funding and the date when relocation must be completed must be reasonable considering the work that needs to be done. The amount of work may vary by licensee. As noted in the cost summary above, Illinois has extensive quantities of radios, vehicular repeaters and fixed stations in its system that must be relocated to the new spectrum. These numbers continue to grow as new users are being added to the system so the longer a decision takes on this important issue, the greater the cost will be. The "relocation" of vehicular repeaters is actually the removal of existing vehicular repeaters that cannot be returned or reconfigured to meet the new bandplan and the installation of new replacement vehicular repeaters.*
10. If a hard deadline is set for mandatory relocation, are there incentives that could be established for earlier voluntary relocation?
  - a. *Illinois response: Sufficient funding and adequate time to perform the work that must be done to complete the relocation should be provided as the incentive.*
11. Should relocation be dependent on the plans made by FirstNet for deployment in a particular jurisdiction?
  - a. *Illinois response: the earlier FirstNet plans its actual broadband deployment, the earlier it will be necessary for the Commission and FirstNet to confirm funding and make it available.*
12. If so, how would such a "rolling" transition work? In this regard, we note that existing narrowband operations are present only in the 763-768/793-798 MHz band, and not in the D Block. Is it feasible for FirstNet to pursue deployment of the nationwide network solely using the D Block in those areas where incumbent

narrowband operators have yet to be relocated? How long such an arrangement could feasibly be maintained?

*a. Illinois response: It is Illinois' understanding that FirstNet plans deployment of broadband over the entire public safety broadband spectrum which includes both the spectrum originally designated for public safety broadband and the D block added to that public safety broadband spectrum by Congress. Even if broadband deployment were initiated on a portion of the spectrum with the remaining added later, we suspect that would incur extra costs later to make that transition. Therefore, from Illinois' perspective, it does no good to put off the decision to sufficiently fund the narrowband relocation.*

13. What would be the impact on interoperability, either for the incumbent narrowband systems or for the new broadband operations?

*a. Illinois response: For broadband, this question must be answered by broadband engineers. For Illinois narrowband system, provisions must be made for interoperability across the systems' end users both during and after the transition.*

14. Would pursuing such a course of action result in additional costs to the nationwide network?

*a. Illinois response: That is a question FirstNet must answer. However, as noted above, whenever a system is modified, cost is usually incurred.*

15. What interference protections would need to be imposed to protect narrowband operations?

*a. Illinois response: Illinois does not believe broadband and narrowband deployments can be made in the same territory on the same spectrum without mutual interference occurring between the systems. The State has consented to some broadband testing over the last several years because such testing occurs in a relatively confined area that is outside the area where we use the same frequencies for vehicular repeaters or other aspects of our 700 MHz system. However, FirstNet is charged with the deployment of a nationwide broadband system so that seems to presume it would be using the broadband spectrum, including the segments on which Illinois narrowband system currently operates, throughout the entire state of Illinois. Accordingly, the State does not see an alternative to the Commission and FirstNet dedicating funding for the narrowband relocation.*

16. We seek comment on whether there is adequate spectrum available to support the relocation of these incumbent narrowband operations. What spectrum is available to support them?

a. *Illinois response: Illinois defers to the Commission. It is our understanding that there are 96 12.5kHz pairs of which 48 are clean pairs. The amount of spectrum would not have changed with the spectrum shift. There could be some overlap with the new to old band plan. A study would need to be performed or at least a matrix of pre and post for comparison by frequency and not channel number should be created by the FCC. IN a complimentary comment regarding a related issue the 6.25 kHz requirement should be postponed. Even when funding is provided, relocation is a huge drain on public safety resources. Public Safety is willing to move in order to be compliant, but we need to find a permanent spot and stay put.*

17. Is there sufficient spectrum in the state or general narrowband allocations in the consolidated 700 MHz public safety narrowband spectrum?

a. *Illinois response: The assumption is that the original state allocation is in use now and the State will relocate to the "new" state allocation without any loss of spectrum.*

18. Can or should the Commission defer addressing timing for incumbent relocation until a state chooses whether or not to opt out of the nationwide network?

a. *Illinois response: No. Until it is clear whether FirstNet's broadband network will meet public safety requirements and if so, the cost each state will incur to subscribe, it is premature for Illinois to address opting out. We suspect other states are in a similar situation. Even if a state were to decide that opting out is necessary, it is Illinois' understanding that FirstNet funding would be made available to that state for radio access network (RAN) deployment under the provisions of the Spectrum Act. Therefore, Illinois sees no reason for the Commission to delay decisions to fund for narrowband relocation. Funding is necessary for the relocation to take place.*

19. If narrowband operations are present in the existing broadband spectrum in a state that chooses to opt out of the nationwide network, how should the narrowband operations be treated?

a. *Illinois response: Illinois Response: See our response to question 18.*

20. Should we allow the State to determine whether or not to relocate these operations, or to pursue an additional waiver to allow their continued operation?

a. *Illinois response: No – We need a cohesive national approach that ultimately has the same broadband spectrum nationwide and the same narrowband spectrum nationwide.*

21. Does allowing such continued operation endanger narrowband interoperability with adjacent jurisdictions operating in the consolidated narrowband spectrum?

a. *Illinois response: Not with proper cooperation and planning*

22. Does it endanger broadband interoperability with adjacent jurisdictions or with FirstNet?

a. *Illinois response: Yes – If sufficient funding is not made available to support the narrowband relocation.*

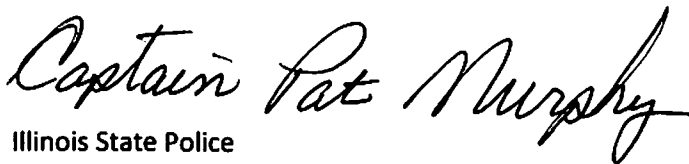
23. How should interference protection be structured?

a. *Illinois response: With proper planning and separation of broadband and narrowband operations into their own spectrum block at the conclusion of the relocation, we should not have an interference problem.*

### **Conclusion**

The state of Illinois appreciates the opportunity to provide its comments to this Notice of Proposed Rulemaking. The State is committed to continuing its leadership in mission critical public safety communications. We understand the need for nationwide availability of public safety broadband tools available to First Responders. The State is committed to relocating its narrowband operations out of what is now broadband spectrum into narrowband spectrum per the reconfigured bandplan as soon as possible once the Commission and FirstNet make sufficient funding available to do. The State believes that can occur if the Commission, FirstNet and NTIA jointly agree and decide that relocation costs are an eligible expense under the deployment funding provided to FirstNet by Congress.

Respectfully submitted,

  
Illinois State Police

May 22, 2013

cc:

Illinois Statewide Interoperability Coordinator (SWIC)

Chair of the Statewide Interoperability Executive Committee (SIEC)